

**ABSTRACT**

A dispersion optimized fiber having higher spot area comprising a center core region, a cladding region, a ring core region and an outer glass region is provided, wherein the cladding is provided onto the outer periphery of the center core, and the ring core is provided onto the outer periphery of the cladding, and the outer glass region surrounds the ring core region, and the center core and the ring core have refractive indices higher than the outer glass region and the cladding region has lower refractive index than the outer glass region, and the refractive indices are constrained by the equation  $n_1 > n_3 > n_4 > n_2$ . In accordance with the preferred embodiment, the cladding region is divided into two regions - inner cladding region and an outer cladding with the ring core disposed therebetween, wherein the inner cladding is provided onto the outer periphery of the center core, and the ring core is provided between the inner cladding and the outer cladding is provided onto the outer periphery of the ring core, and the outer glass region surrounds the outer cladding, and the refractive indices are constrained by the equation :  $n_1 > n_3 > n_5 > n_2 = n_4$ .